

You Take Orders From Me Now

(Re-)Considering Digitality, Interactivity, and Decision-Making

Jan Distelmeyer

One fascinating characteristic of interactive documentaries, it seems to me, is that they test. They do this on several levels. They invite us to try out different forms that non-linear documentation can take. They test one's ability to make decisions. And they are also a test for the viability and precision of established concepts. "In a wide diversity of projects with varying modes of interactivity and technological possibilities depending on the software used," as Vanessa Zallot has put it, "standard terms such as narrative, production or authorship are challenged" (Zallot 2022, 70).

The reason for this plurality of testing is rooted in a certain understanding of interactivity. According to a pioneering definition by Judith Aston and Sandra Gaudenzi, "any project that starts with an intention to document the 'real' and that uses digital interactive technology to realize this intention can be considered an interactive documentary" (Aston and Gaudenzi 2012, 125). As Aston and Gaudenzi note, characterizing the close association of the "digital" and the "interactive", "interactivity requires a physical action to take place between the user/participant and the digital artefact" (ibid.).

At first glance, this "physical action" could be the link that holds together the "interactivity of the documentary" and the "mediality of the decision" – those two aspects that give the research project of this volume its contours.¹ For Tobias Conradi, Florian Hoof, and Rolf F. Nohr, who write "wherever decisions are made media are present to prepare them, document them, announce them, archive them or, if necessary, make them themselves" (Conradi, Hoof, and Nohr 2016, 10), the aforementioned digital interactive technology seems to be crucial here. But how can this technological narrowing of "digital" and "interactive" be understood (today)?

While it is obvious that this combination of interactivity and digitality challenges the traditional concepts of film (aesthetics), documentaries, and narration,² this established understanding of digitality and/as interactivity has itself been subject to scrutiny for some time now. I would therefore like to take the connection

1 Cf. HSLU 2022.

2 Cf. Krautkrämer 2012.

between interactivity, digitality, and decision-making as a starting point for some reflections on historical and contemporary developments. From the multitude of possible facets and examples that are constantly increasing due to the expanding diversification, embedding, and networking of computer technology, I will concentrate – bearing in mind the context of interactive documentaries – especially on film-related examples. My interest thus leads from specific promises and practices, once called interactive, to decisive characteristics of computers and of digitality in order to discuss some – discursive and programmatic – changes with regard to the interactive and (its relation to) the decisive qualities of digitality.³ These changes promote new ways of understanding, dealing with, and deploying digital technologies, which I will discuss as “programmatic relations”. Along the way, I will draw particularly on examples from the U.S. film industry, beginning my retrospective in the 1990s.

“Whatever You Want”: Interactivity as the Hottest Ticket

In the first half of that decade, the term “interactive” rose to prominence as one of the key concepts aiming to make the technical and cultural shift to “the digital” comprehensible and vivid. Until well into the 2000s, it served as a kind of identifier for what the digital could mean – a kind of participatory signal of this turning point in history, often described as the “digital revolution” or “digital era”.

Two bestsellers of the 1990s offered paradigmatic examples. In *Being digital* Nicolas Negroponte praised the “intrinsically interactive media, made possible by the digital lingua franca of bits” (Negroponte 1995, 63). In *The Digital Economy*, first published in 1996, Don Tapscott concluded: “The New Media are interactive, however. The user has control” (Tapscott 2014, 379). Wendy Chun discussed and analyzed this dominant interlocking of digitality, interactivity, and new media in 2006 as follows:

The term “new media” came into prominence in the mid-1990s, usurping the place of “multi-media” in the fields of business and art. [...] The singular plurality of the phrase (“new media” is a plural noun treated as a singular subject) stemmed from its negative definition: it was not mass media, specifically television. It was

3 Digitality is a complex and challenging concept. In the humanities (in German media studies since the early 1990s), it is used as a kind of counter or complementary term to more prominent notions such as “digital transformation”, “digital revolution”, “digital era”, etc. Like these other umbrella terms, digitality aims at an elusive totality – but explicitly combines the technological with cultural, social, political, economic, and ecological issues. In this sense, digitality refers to the totality and peculiarity of the conditions and consequences of electronic digital computing in all its forms (cf. Distelmeyer, 2022; Franklin 2015; Hassan 2020; Stalder 2016).

fluid, individualized connectivity, a medium to distribute control and freedom. Although new media depended heavily on computerization, new media was not simply “digital media”: that is, it was not digitized forms of other media (photography, video, text), but rather an interactive medium or form of distribution as independent as the information it relayed (Chun 2006, 1).

This widespread promise of “interactivity” left its mark on the film industry. What I have described elsewhere as the urgency of digiti(liz)ation⁴ was particularly evident in Hollywood’s interest in interactivity at that time. As *Variety* reported in 1993, the year in which the annual Digital Hollywood Conference was founded: “Clearly: interactive entertainment – where pictures, sound and text are merged into one compact disc – is the hottest ticket in town” (Rothman 1993).

The crucial question was: How to participate in the hype of digital progress so as not to be left behind? Before this hottest ticket was finally sold so successfully by the film industry with the launch of the DVD in 1996/97, the hotness was repeatedly paraded. Particularly striking and telling was its appearance in the world’s most successful blockbuster of the early 1990s, *Jurassic Park* (1993).

Fig. 1: “It’s an interactive CD-ROM!”, *Jurassic Park* (Steven Spielberg, 1993)



Source: *Jurassic Park* (Steven Spielberg, Universal, 1993), screenshot.

4 Cf. Distelmeyer 2012, 225–251.

Here, two children, self-ironically introduced in the film as “our target audience,” get to marvel at something quite contemporary rather than prehistoric animals as the dinosaur park’s first attraction. Immediately after their arrival, the teenagers discover a computer monitor with touchscreen capabilities in one of the park’s exploration vehicles. In close-up, the film testifies to what is jubilantly described thus: “It’s an interactive CD-ROM! You must see: You just touch the right part of the screen and it talks about whatever you want!”

Interactivity was indeed a kind of hallmark of “the digital” in the 1990s. And it really helped to sell DVDs. The success of the DVD format was as enormous as it was fast – in 2002 (just five years after its launch) the DVD was already the most important revenue driver in the film industry worldwide. For advertising purposes, the concept of the digital was used to promise a new audiovisual quality that was supposed to be clearer and more brilliant than analog VHS technology. At the same time, paired with its multimedia capabilities, the digital was also associated with a certain type of control dubbed “interactivity”.

In an exemplary manner the Sony commercial “This is DVD” from 1999 highlighted the interactive form of selecting bonus material (“8 languages”, “32 subtitles”, “fullscreen or letterbox format”, “alternate camera angles”, “entertaining extras”, “trailers”, “behind the scenes interviews”, “making of features”, “director’s commentary”) presented alongside the film. An expert explained into the camera: “Because its data streams are digital, DVD gives you lots of playback options to choose from” (Sony 1999).

The film industry thus tried to participate in the interplay of interactivity, flexibility, and empowerment that shaped the myth of digitality in the 1990s.⁵ A hard task for an industry, whose productions, linear film, are far away from these promises of, in Negroponte’s words, *being digital* and, in Tapscott’s words, *users having control*. Brian Sebok summarized the outcome: “DVD was described as a tool of empowerment for consumers, enabling users new degrees of control and access to content” (Sebok 2007, 3). This gesture of power was also remarkable because the actual possibilities for access and control were kept within fairly narrow limits, partly for technical reasons.

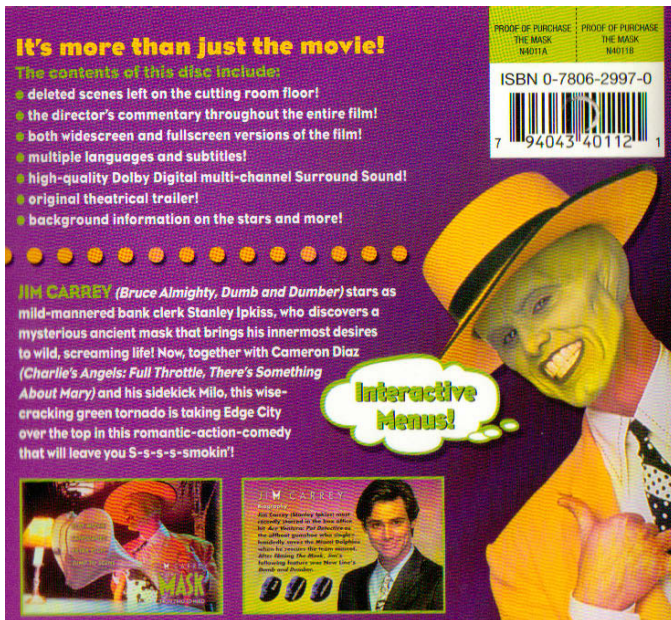
Productions such as *I’m Your Man* (Planet Theory/DVD International, 1998), whose interactivity consisted of “choice-points” that required viewers to make decisions during the movie were quite rare, and the task of highlighting interactivity primarily focused on the DVD menu. In the spring of 1997, when studios released their first DVDs in the U.S. market, the covers of DVDs such as *Batman*, *Twister*, *Blade Runner – The Director’s Cut* (all Warner Home Video, 1997), and *Singin’ in the Rain* (MGM/UA Home Video, 1997) advertised their “interactive menus” on the cover. The announcements, commentaries, and advertisements that accompanied the

5 Cf. Rothman 1993; Distelmeyer 2011.

introduction of the new medium reinforced its interactive potential. In January 1997, DVD advertisements by Warner Home Video started enumerating “additional features” which “DVD users” could select from “an interactive, on-screen menu system” (“Warner home video announces” 1997). In October of the same year *Variety* stated that “DVD is actually evolutionary, blurring the lines between games and movies, linear stories and interactive stories” (Pursell 1997).

Menus tried hard to prove the interactivity of the new medium. They sought to fulfill digitality’s promise of empowering flexibility, which was of great importance for the development of flexible capitalism. For DVDs, menus were something like the ostentatious certificate of their digital character – proof of the completed transition “over to the digital era” (Brookey 2007, 205).

Fig. 2: DVD-Cover *The Mask*: “Interactive Menus!”



Source: Cover *The Mask* (New Line Home Video, 1997/1998)

The emergence of (laserdisc-inspired) “additional features”, which became standard as “special features” and “bonus material” on DVDs, was in no small part due to this pressure to embrace interactivity. And it is therefore not surprising that in the early years of DVDs, these options for decision-making were among the most prominently highlighted and often first-named “special features” on DVD covers:

“Interactive Menus”. They not only provided access to attractions, but were produced and advertised as attractions themselves. The latter applies both to the elaborate design of the menus, for example, and to the attraction of being able to make decisions. The fact that menu-based interactivity only allows for very limited options – especially in comparison to computer games – led to a tendency in the early/mid-2000s to design particularly elaborate menus featuring complicated animations, which provoked criticism of “over-produced menus”.⁶ Menus can be seen as gestures assuring audiences (now: “users”) that both they and their movies were living up to the promise of the future: by being digital.

The (Inter-)Activity of Programmatic Machines

Among the changes that have taken place since the late 1990s, it appears that interactivity is no longer being pushed as one of the key promises and explanations of the digital. A few remarks on the basic attributes of computerized interactivity and its relation to computer technology in general will help us to trace some of these changes. This background is also crucial if we wish to further explore what interactivity can actually do for documentaries. As Florian Krautkrämer has emphasized for “database cinema”, the fact that “these films are *more or less* interactive or suggest interaction” applies no less to interactive documentaries. This then raises the question of “what effects” a relevant concept of interactivity “can have on the image design” and on the documentary form generally (Krautkrämer 2012, 305, emphasis added).

The idea of interactivity encompasses very different forms of relations. Computer-based interaction works differently from other (and older) forms of interaction between people, such as “interactive teaching”, in which “the teacher,” as Arbona Xhemajli puts it, is “the basic instigator of interaction with his/her pupils” (Xhemajli 2016, 31).

As many students and teachers learned while using platforms such as Zoom or BigBlueButton during the Covid-19 pandemic, *the basic instigator* in such environments is quite different. Any interactivity in these cases is conceptualized, enabled, and limited insofar as it is first and foremost something I perform and experience using software and hardware. Thus, every form of (inter-)action must have been planned and programmed beforehand and exactly foreseen to become feasible at all. For each possible (and then maybe spontaneous) human activity, a decision must have been made in advance in the programming.

In addition, computer-based forms of interactivity follow the patriarchal-military “Yes, Sir” logic, rooted in the pre-history of software in the 1940s, as Wendy

6 Cf. Distelmeyer 2012, 108–117.

Chun has shown (Chun 2013, 29–34). In our interaction with computers, our inputs consist of nothing but orders; and if these are not followed immediately, something seems to be out of order.

Hence, how computers and their functions open up to me, how I can react to what is made available to me via user interfaces, has to be determined in detail by programming. A question of decision-making: My freedom of action exists only because and insofar as it is granted. These conditions of interactivity do not automatically lead to an increase or a reduction in freedom. But they lead directly to a simple but essential characteristic that distinguishes computers from other machines: Computers are programmable. That is why they have been known, since about 1945, as “general-purpose machines”. Electronic digital computers can and will adapt to the most diverse purposes. In this sense, computers are “programmable machines”: What they accomplish, they do both based on their programmability and through the execution of specific programs (that is why I call them programmable machines and not just programmable machines).

Computers become productive because they are programmable and they execute programs. As programmable machines, computers can fundamentally distinguish between two states. If one follows Alexander Galloway’s abstraction that “the digital is the basic distinction that makes it possible to make a distinction at all” (Galloway 2014, xxix), this fundamental distinction becomes concrete for electronic digital computers as a voltage difference (conceived in the human sign system as ones and zeros). For Conradi, Hoof, and Nohr the “specific ‘computist’ decision rationality” based on “the binary code of the computer and logical circuits” is a prime example of “decisions inscribed in the functioning of technical media” (Conradi, Hoof, and Noor 2016, 13). Programming itself means (not least) making decisions in special ways and environments.⁷ All programs written in programming languages with their “logical ‘if-then-scheme’” are, as Dieter Mersch has put it, ultimately “decision calculi” (Mersch 1991, 111).

Current machine-learning methods are changing these decision-making processes in a certain way. The processes of what is called “artificial intelligence” (and which Algorithm Watch has much more accurately termed “algorithmically controlled, automated decision-making (ADM)”, Alfter, Müller-Eiselt, and Spielkamp 2019, 9) operates differently from classical programming. Nevertheless, it also involves decision calculi. The goal of these programmed forms of automated optimization is “to enable a computer to learn from experience in order to solve specific tasks and make predictions without having been explicitly programmed to perform this function” (Sudmann 2018, 10). Patterns are detected within collected data, from which probabilistic assessments and decisions are derived in order to – first – stabilize the detected patterns (by predicting the past) and – second – handle future

7 Cf. Soon and Cox 2020.

decisions.⁸ Hence, what is referred to here as “learning” and “intelligence” is a specialized, automated quasi-independence of decision-making which must first be created, aligned, and trained. “AI systems,” Kate Crawford concludes, “are not autonomous, rational, or able to discern anything without extensive, computationally intensive training with large datasets or predefined rules and rewards” (Crawford 2021, 8).

Without being able to here delve further into the diverse forms of computing that exist, we can draw the following preliminary conclusion: Issues of interactivity and decisions related to computers and digitality are intertwined for different – fundamental and historical – reasons. In order to enable interactivity with and through computers, decisions (by “users”) are not only requested, but are made possible in the first place by decisions taken in advance. The 1990s showed that interactivity functioned as a kind of hallmark of digital progress, which the DVD format used in its own way to establish a special form of “new media”.

Always On

I have taken a somewhat technical detour to return to the beginning and thus via decisions once again to interactivity. For this development towards algorithmic decision-making a.k.a. AI belongs essentially to those changes in the understanding of what today (if it can be said at all so generally) is more and more associated with the term “digital” – and has complemented if not partly supplanted the former hallmark of interactivity.

This change in the understanding of the digital became particularly visible during the 2010s. Something has been added to the earlier demarcation from the analog that was articulated – especially in the 1990s and early 2000s – in the mythical promises of immateriality and flexibility of the digital, which includes the gesture of being interactive. The word “digital” is no longer used only in the context of computerization as such, but refers more and more to a specific organization and multiplication of computing: the processing of data in distributed networks. The attribute “digital” is increasingly ascribed to what can be processed and is available online (i.e. thanks to the infrastructures of the internet).

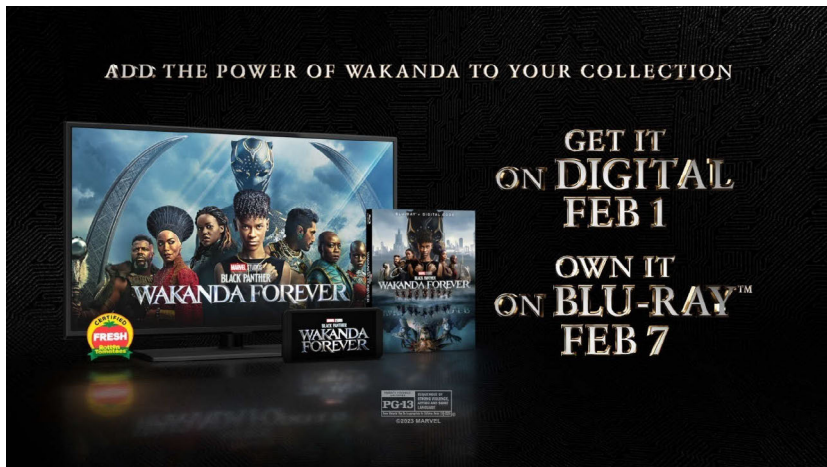
This can be seen for example in important theoretical works on digitality and digital objects. Felix Stalder describes digitality as a “set of relations that is currently

8 As Wendy Chun has pointed out, what is special about this decision-making and prediction technology is that these machine-learning programs are considered successful and productive when they are proven correct in tests on data that has already been captured. So their first task is not to predict the future at all: “The models were then tested on their ability to predict this meticulously pruned past” (Chun 2021, 45).

being realized based on the infrastructure of digital networks” (Stalder 2016, 14) and Yuk Hui cites as examples of “digital objects” online videos and images as well as Facebook profiles, because “the significance of the recent development of data processing, that which we have since proclaimed as the digital, demonstrates the extension of data-exchanging capabilities beyond individual computers such that we can process large amounts of data by establishing connections to form data networks that extend from platforms to platforms, and from databases to databases” (Hui 2016, 49).

The debate about the importance of digital technologies in dealing with the Covid-19 pandemic from 2020 onward strengthened this conceptual movement. “Digital” here repeatedly signified a state of programmatic networking. In this context, “digital tools” were quite naturally understood as the means of an “online culture” (Roose 2020). And articles like “The digital now holds us together” (author’s translation from the German) identified computer-based networking (exemplified as “social media” and “streaming”) as “our sanctuary” that kept “work processes, learning opportunities and social interaction” up and running in the “catastrophic situation” (Rosenfeld 2020). Just as, especially in Germany, the Covid-19 pandemic may have promoted the acceptance of digital transformation,⁹ it may also have further normalized the equation digital = programmatic network.

Fig. 3: *Wakanda Forever* Advert, 2023, “Own it on Blu-Ray”



Source: *Wakanda Forever* Advert, 2023

9 Cf. Müller 2020; Bär 2020.

Once again, however, it is the film industry that provides particularly telling examples of how the understanding of “digital” has changed. In promoting the sale of their products, both through digital formats such as Blu-ray and DVD as well as online via streaming and downloading, subtle distinctions have been established since the mid-2010s. DVD and Blu-ray (data-storage formats based on digital-optical discs) are now contrasted with online availability, with the attribute “digital” being granted only to the latter. The release date “on digital” is juxtaposed with “DVD and Blu-ray”, while advertisements state “get it on digital” versus “own it on Blu-ray.”

That is how Amazon’s streaming platform came to announce the availability of the German series *You Are Wanted* in July 2017 with the absurd addition that “the series will soon also be available on DVD – completely analog” (Amazon Instant Video Germany, 2017). The Digital Versatile Disc, whose digital quality was once so extensively advertised and promoted as a unique selling point (“Because its data streams are digital...”) proven by its interactivity is no longer digital enough. Data storage media are nothing, data traffic is everything. Needless to say, this shift fits perfectly with the rise of the platform economy.

An important role in establishing this new understanding of “digital” as synonymous with “internet-based” has been the success of touch-screen user interfaces of mobile computers, which followed the launch of the iPhone in 2007. The coexistence of apps for calculation or word processing next to the “Weather”, “Stocks” and “YouTube” app, which in contrast to apps like “Calculator” and “Notes” always require an active internet connection, started to familiarize “users” with this new meaning of digitality. This novel way of thinking, which seems almost too obvious to mention now, stipulates that an internet connection is nothing additional, but the standard. *Always on* is – and has been for a long time now – the new normal. The energy consumption required for this has of course far-reaching ecological consequences. If digital goods and objects require not just my phone but a permanently functioning network infrastructure based on vast numbers of network machines, the entire planet is not only traversed by cables, masts, and server parks, but is also being consumed (from materials to energy consumption to the cooling power of water and ice).¹⁰

These well-known developments suggest that digitality’s formerly important promise of interactivity has been supplemented, or even partially displaced, by another promise in recent years: The promise of permanent technological activity (and the accompanying desire for relief from conscious human activity) based on globe-spanning (and consuming) infrastructures, currently also reflected in the concept of the “technosphere”.¹¹

10 Cf. Parks and Starosielski, eds. (2015).

11 Cf. Schneider 2019.

This promise combines the *always-on* of persistent internet services and the algorithmic decision-making of AI. Comprehensive programmatic automation, a goal of computer development from the very beginning, thus reaches a new level. It may therefore not be so far-fetched to rephrase Don Tapscott's late 1990s summary of the mythical promise of the digital, "the new media are interactive," into the no less mythical "the new digital is always active."

The fact that the technical realization of this activity requires a permanent recourse to human work, decisions, and responsibility, so that the relief of some always creates a burden for others, is not the focus of these promises of automation.¹² However, it is this ongoing technological activity on which so many current and coming programmatic relations, so many forms of digitality, rely. Our everyday use of smartphones and voice assistants is just as much a part of that as developments in autonomous driving and concepts of smart cities, in which we no longer have to consciously interact to provide input – thanks to the sensors of the computer-based and networked elements that detect and regulate, the various systems communicating via a range of interfaces (all kinds of inputs and outputs as well as communication within and between computers).

New Orders: Detecting, Evaluating, and Automating Decisions

Once again, the example of the film industry shows in its own way how permanent technological activity and automated decision-making have now complemented and perhaps partially supplanted interactivity as the hallmarks of digital progress. For the gesture and promise of streaming platforms such as Netflix is not so much a form of (digitality's) interactivity that requires series and movies to be presented with many special functions and click options. Rather, the promise of streaming – which applies in the same way to other major providers such as Amazon Prime, Disney+, and Paramount+ – is the supposedly permanent availability of a rich (and constantly advertised) selection of content.

Against the media-historical background that the quality of what is called digital no longer needs to be demonstrated interactively, but rather proves itself in reliable always-on network processes, there is no longer any urgent need for a vast amount of bonus material, at least not for this reason. The previously established association between "the digital" and a variety of "options to choose from" is no longer apparent (Sony 1999). In the case of Netflix, which started out as a DVD rental company before becoming a streaming platform, it is particularly noticeable that the "special features", which used to be so important for DVDs, are conspicuously rare or

12 Cf. Crawford 2021, 7–21.

absent here (with the exception of language or subtitle variants and occasional trailers). More important is the promise of availability as the *always on* – the preferably never-ending data stream of a constantly updated portfolio of titles, showcased in the menus of platforms that list films as a software service.

That is why – and because for the big streaming platforms user data is now an important special feature on its own account¹³ – the gesture of interactivity has shifted to the portfolio menu. One could simply say that the former causality of digital data streams and choices has moved to the choice of titles presented as an “order of selectivity” (Distelmeyer 2017, 100). It is no longer a film but the platform itself (as a resource for films and user data) that is the focus, and, accordingly, it is not the menus and additional features of individual titles that matter and are carefully designed, but the menu of the platform itself.¹⁴

As in so many media constellations based on computing and once sold as “new media”, this order of selectivity relies on the idea of the grid (Krauss 1979). More precisely, the traditional grid of operational images, which has become a constant and close everyday companion since the introduction of the smartphone at the latest, organizes the mode of choice here: The aesthetics of command appears as a grid of operational images of films and series.

Moreover, this mode and gesture of interactivity is complemented by a slightly different activity. Based on algorithmic decision-making, Netflix and others are constantly offering suggestions to assist the user in choosing the next title to watch (thereby keeping them on the platform) that no longer require human agency alone. Netflix promotes this, stating that “machine learning powers our recommendation algorithms” (Netflix 2023). Thus, in addition to the order of selectivity that enables me to make decisions, recommendations in the thumbnail grid of titles or in the form of presentations directly following titles I have already watched represent another (no longer human, but machine) form of decision-making.

This presence of automated recommendations that complement (or replace) human decision-making with on algorithmic decision-making (which is also co-produced by humans in significant regards) was taken to the extreme in 2021 by a special service offered by Netflix. During the height of the COVID-19 pandemic, and hence the height of streaming service use, Netflix introduced the “Play Something” mode. It was later renamed “Surprise Me” and described by the Netflix Director of Product Innovation in April 2021 as follows:

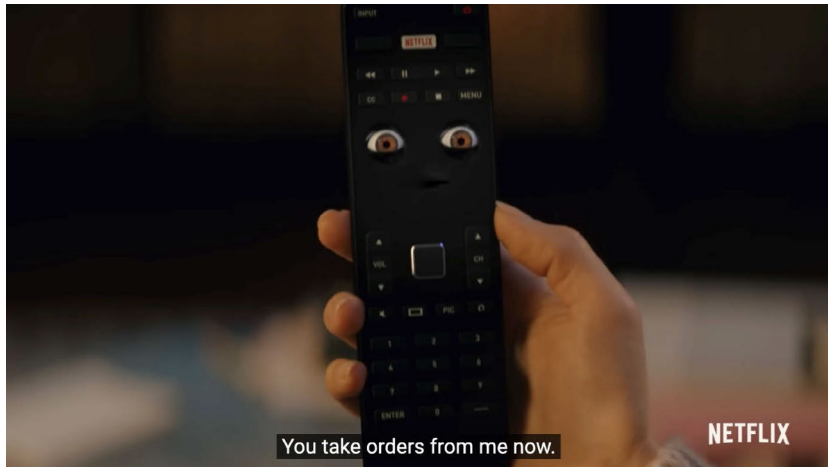
There are times when we just don't want to make decisions. A Friday evening after a long work week. A fridge full of food but nothing jumps out. A family movie night where no one can agree. We've all been there. Sometimes you just want to open

13 Cf. Srnicek 2017.

14 For an exploration of the metaphorical interface design of Netflix, see Fahlenbrach 2023.

Netflix and dive right into a new story. That's why we've created Play Something, an exciting new way to kick back and watch. When you hit the "Play Something" button, you'll be instantly met with a series or film we know you'll love based on what you've watched before (Johnson 2021).

Fig. 4: *Play Something* (Netflix, 2021)



Source: *Play Something* (Netflix, 2021), screenshot

The new feature was advertised in a video in which an initially astonished, but then happy couple is enlightened by their talking remote control – after being strongly admonished to refrain from pressing the buttons all the time:

“Would you knock it off with those giant thumbs?”

“Sorry, we’re just looking for something to watch.”

“You never thought that maybe pushing my buttons all day was going to be harmful to me? You take orders from me now! I’m going to show you a little thing called ‘Play Something’. [...] Netflix will drop you right into a new show or movie, and it’s all based on what you’ve watched” (Netflix 2021).

The remote control takes over, the couple clicks “Play Something”, and happily settles into the movie that starts, clearly enjoying it. The audience’s instruction ends with: “Sometimes the best choice is not to choose” (ibid.).

Whether this radical innovation – taking orders from the apparatus – went too far or the automated recommendations of this “something” simply turned out to be too infrequently a desirable “surprise”: two years later, the service was discontin-

ued. In February 2023, a Netflix spokeswoman was quoted as saying that the company “will continue to explore other ways to give members more options and ways to explore and discover content they want to watch” (Deighton 2023). Nonetheless, this intermezzo and the way it was promoted provides a vivid example of how the promises of digitality, interactivity, and decision making (and their relationships to each other) have changed since the 1990s.

This includes, not least, the fact that human decisions are now increasingly being captured, stored, evaluated, and used to derive automated decisions. My decisions are not only made for myself – they are part of evaluation procedures, which in turn (are intended to) enable further decisions by machines and humans.¹⁵ *Sometimes the best choice is not to choose*: In today’s programmatic relations, it is not always necessary to make one’s own decisions, because, according to the promise, the next decision can be aptly predicted from the history of those that have previously been captured. And of course, the interactions that enable this involve more than just “users” and “digital interactive technology” or “participants” and “the digital artefact”. The process requires a global – material and conceptual – infrastructure and relies on always-on computers and persistent practices.¹⁶

Reflecting this shift in terms of digitality, interactivity, and decision-making could be an ideal task for the field of interactive documentaries. For it is precisely the characteristic of being shaped by “modes of interactivity and technological possibilities depending on the software used” that is particularly challenged by these developments of digitality (Zallot 2022, 70). The interactive documentary *Made to Measure* (Group Laokoon, 2021) gives some indication of where this might lead. Its starting point is the question of whether a person’s life can be replayed using their Google data:

Made to Measure is an experiment that asks if you can reconstruct a person based solely on their digital data trail. Can you build a doppelganger of a person you don’t even know? Record, recreate, and replay the life of someone and their personality in detail? [...] We chose a data record that documents five years of a person’s life. It would have been difficult to combine all the data that Google, Facebook and other data brokers have collected about this person. Therefore, we limited ourselves to the data Google is legally required to release, according to EU laws. We discovered Google had accumulated over 100,000 data points about the person over the last five years (“About Made to Measure” n.d.).

For this experiment with a volunteer’s data, the Laokoon group asked an actress to play the unknown protagonist based on the collected data, with the climax of the film

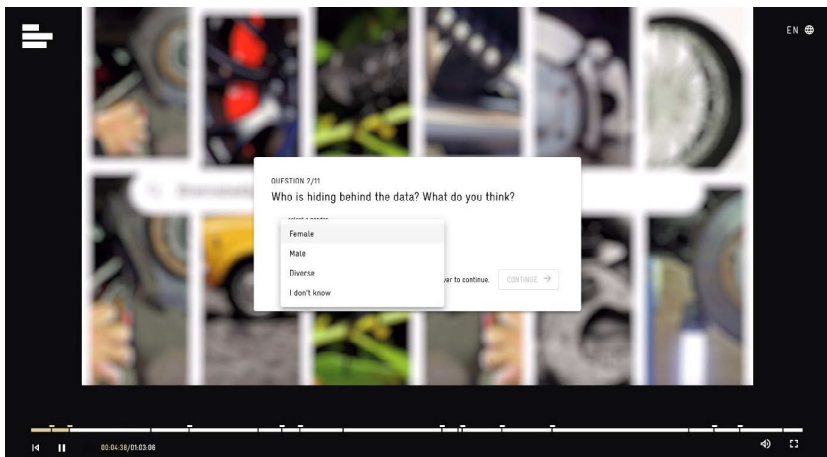
15 Cf. Netflix Technology Blog 2020.

16 I have described this multi-layered interaction of various operations and processes elsewhere as an “interface complex” (cf. Distelmeyer 2022, 51–92).

being a confrontation between the original subject and her double. While the project already presents exciting (self-) observations as a classic documentary,¹⁷ the internet version of *Made to Measure* gains another dimension (Laokoon n.d.). The user can only gain access after ticking the usual cookie and privacy consent boxes, which include the phrases “you agree to access data about your website usage in your browser while visiting the website of GRUPPE LAOKOON GbR [...] to track your activities based on device and browser settings [...] for the purpose of integrating streaming content, statistical analysis and individualization of content as part of our experiment on our website. [...] Without your consent, we cannot offer the experiment in its entirety” (ibid.).

The capture function requested here is indeed important, because in the course of the documentary, about a dozen questions are asked about the content shown (e.g., “Will the person behind the data recognize themselves in the ad?”), which one has to answer by choosing from a selection of possible answers to enable the film to continue. However, the special feature of this form of interaction is not the usual procedure of having a different scene follow depending on the decision made. What makes this deciding interaction so interesting is quite another consequence.

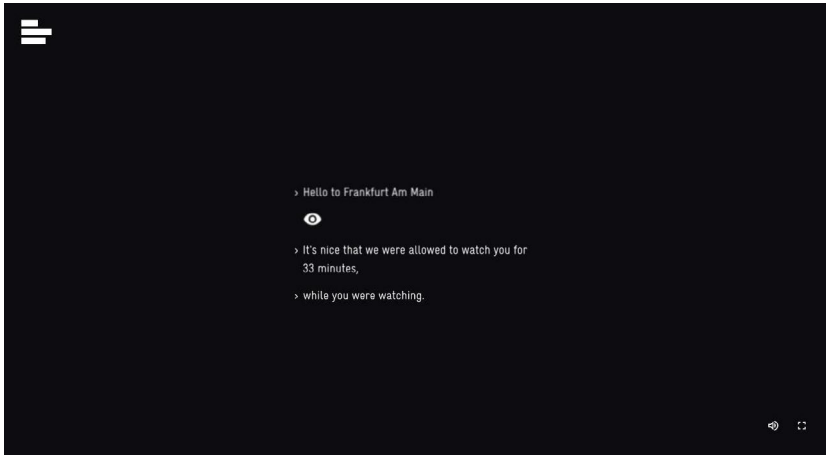
Fig. 5: Screenshot *Made to Measure* (laokoon.group, 2021)



Source: *Made to Measure* (Hans Block/Moritz Rieseweck/Cosima Terrasse, 2021)

17 A linear version was broadcast on television in June (Westdeutscher Rundfunk) and October (Deutsche Welle) 2023: <https://www.youtube.com/watch?v=7CEeAkNmMms>.

Fig. 6: Screenshot *Made to Measure* (laokoon.group, 2021)



Source: *Made to Measure* (Hans Block/Moritz Riesebeck/Cosima Terrasse, 2021)

Based on one's click patterns, decisions, IP address, viewing duration, and information about, for example, one's browser and screen resolution (all information that is continuously conveyed at the software level for the purpose of displaying websites), one's own profile is evaluated at the end. This is presented in a fairly detailed record that segues into a psychogram. As a result, the evaluated personal interaction and that of one's own device become, with (self-)ironic comments, perhaps the actual highlight of this experiment, in which those who supposedly only watched took part themselves. Each programmatic bulletin begins with "Hello to [location via IP address]. It's nice that we were allowed to watch you for [personalized number] minutes, while you were watching." In this, the quality of the assumptions about the user's personality structure ("We can see you have a critical mind by your choice of browser: Firefox") is perhaps less important than data captured and represented in the *Made to Measure* project.

This interactive documentary, about which much more could be said, cleverly and surprisingly puts up for discussion what interactivity actually might mean today: a combination of human and machinic agency, in which decisions do not only stand "for themselves" but are part of further decision-making processes that the human agent does not always have to be aware of. In any case, who and what is interacting here, who and what decides what on whatever basis, and which decisions were necessary beforehand or become possible afterwards, are among the crucial questions for the discussion of present-day digitality.

Bibliography

- “About Made to Measure” (n.d.). <https://www.madetomeasure.online/en/about> (last accessed: June 3, 2025)
- Alfter, Brigitte, Ralph Müller-Eiselt, and Matthias Spielkamp (2019), “Introduction. Automating society”, in Matthias Spielkamp (ed.), *Taking Stock of Automated Decision-Making in the EU*, Berlin: AlgorithmWatch, 6–12.
- Amazon Instant Video Germany GmbH (2017), “You are wanted”, Facebook post July 6, 2017. <https://www.facebook.com/watch/?v=1917119448533626> (last accessed: June 3, 2025)
- Aston, Judith, and Sandra Gaudenzi (2012), “Interactive Documentary: Setting the Field”, *Studies in Documentary Film* 6(2), 125–139.
- Bär, Dorothee (2020), “Ich hoffe, dass wir auch digital alle gestärkt aus der Krise kommen”, *Der Spiegel*, March 30, 2020. <https://www.spiegel.de/politik/deutschland/dorothee-baer-ich-hoffe-dass-wir-alle-aus-der-krise-auch-digital-gestaerkt-kommen-a-ed95eacf-3a93-4a06-8e23-1fd995305137> (last accessed: June 3, 2025)
- Brookey, Robert Alan (2007), “The Format Wars: Drawing the Battle Lines for the Next DVD” *Convergence*, Vol. 13, 199–211.
- Chun, Wendy Hui Kyong (2021), *Discriminating Data. Correlation, Neighborhoods, and the New Politics of Recognition*. Cambridge: MIT Press.
- Chun, Wendy Hui Kyong (2013), *Programmed Visions. Software and Memory*. Cambridge, Mass.: MIT Press.
- Chun, Wendy Hui Kyong (2006), “Introduction: Did somebody say new media?” In Wendy Hui Kyong Chun and Thomas Keenan (eds.), *New Media, Old Media: A History and Theory Reader*, New York: Routledge, 1–10.
- Conradi, Tobias, Rolf F. Nohr, and Florian Hoof (2016), “Medien der Entscheidung – Einleitung”, in Tobias Conradi, Rolf F. Nohr, and Florian Hoof (eds.), *Medien der Entscheidung*, Münster: LIT.
- Crawford, Kate (2021), *Atlas of AI. Power, Politics, and the Planetary Costs of Artificial Intelligence*. New Haven, Conn.: Yale University Press.
- Deighton, Katie (2023), “Netflix Sunsets ‘Surprise Me’ Shuffle-Play Button”, *The Wall Street Journal*, February 14, 2023. <https://www.wsj.com/articles/netflix-sunsets-surprise-me-shuffle-play-button-6d29cf2a> (last accessed: June 3, 2025)
- Distelmeyer, Jan (2022), *Critique of Digitality*. Wiesbaden: Palgrave Macmillan.
- Distelmeyer, Jan (2017), “Interfacing with Power: Orders and Computers”, *Cinéma & Cie*, XVII(29), 93–103.
- Distelmeyer, Jan (2012), *Das flexible Kino. Ästhetik und Dispositiv der DVD & Blu-ray*. Berlin: Bertz + Fischer.

- Distelmeyer, Jan (2011), "Modes of presentation. Space, control and the aesthetics of the DVD", in Giulio Bursi and Simone Venturini (eds), *Quel che brucia (non) ritorna: What burns (never) returns*, Udine: Campanotto Editore, 59–73.
- Fahlenbrach, Kathrin (2023), "Audiovisuelles Interfacing. Zum metaphorischen Interfacedesign von Videoplattformen", in Lars C. Grabbe, Christiane Wagner, and Tobias Held (eds.), *Kunst, Design und die "Technisierte Ästhetik"*, Marburg: Büchner, 162–181.
- Franklin, Seb (2015), *Control: Digitality as Cultural Logic*, Cambridge, Mass.: MIT Press.
- Galloway, Alexander R. (2014), *Laruelle: Against the Digital*. Minneapolis: University of Minnesota Press.
- Hassan, Robert (2020), *The Condition of Digitality: A Post-Modern Marxism for the Practice of Digital Life*, London: University of Westminster Press.
- HSLU (2022), "Interaktiver Dokumentarfilm – Die Interaktivität des Dokumentarischen und die Medialität der Entscheidung". <https://blog.hslu.ch/interdocs/project-description/>
- Hui, Yuk (2016), *On the Existence of Digital Objects*, Minneapolis: University of Minnesota Press.
- Johnson, Cameron (2021), "Play Something". <https://about.netflix.com/en/news/play-something-netflix-does-the-work-for-you>.
- Krauss, Rosalind (1979), "Grids", *October*, vol. 9, 50–64.
- Krautkrämer, Florian (2012), "Database Cinema? Datenbankästhetik im Film", in: Stefan Böhme, Rolf F. Nohr, Serjoscha Wiemer (eds), *Sortieren, Sammeln, Suchen, Spielen. Die Datenbank als mediale Praxis*, Münster: LIT, 295–313.
- Laokoon (n.d.), "Made to Measure". <https://www.madetomeasure.online/en/> (last accessed: June 3, 2025)
- Mersch, Dieter (1991), "Digitalität und Nicht-Diskursives Denken", in Dieter Mersch and Kristóf Nyíri (eds.), *Computer, Kultur, Geschichte. Beiträge zu einer Philosophie des Informationszeitalters*, Wien: Passagen, 109–126.
- Müller, Martin U. (2020.), "Doktor auf Distanz", *Der Spiegel* 15, 76–77.
- Negroponte, Nicholas (1995), *Being Digital* New York: Alfred A. Knopf.
- Netflix (2023), "Machine Learning. Learning how to entertain the world". <https://research.netflix.com/research-area/machine-learning>.
- Netflix (2021), "Play Something". <https://www.youtube.com/watch?v=sY2djp46FeY> (last accessed: June 3, 2025)
- Netflix Technology Blog (2020), "Supporting content decision makers with machine learning". <https://netflixtechblog.com/supporting-content-decision-makers-with-machine-learning-995b7b76006f> (last accessed: June 3, 2025)
- Parks, Lisa, and Nicole Starosielski, eds., (2015), *Signal Traffic: Critical Studies of Media Infrastructures*. Illinois: University of Illinois Press.

- Pursell, Chris (1997), "Gauging possible impact of a shiny disc" *Variety*, October 31, 1997. <https://variety.com/1997/digital/features/gauging-possible-impact-of-a-shiny-disc-1116674716/> (last accessed: June 3, 2025)
- Rosenfeld, Dagmar (2020), "Das Digitale hält uns jetzt zusammen", *Die Welt*, March 17, 2020. <https://www.welt.de/debatte/kommentare/article206619163/Corona-Krise-Das-Digitale-haelt-uns-jetzt-zusammen.html> (last accessed: June 3, 2025)
- Rothman, Matt (1993), "ICM aims talent at videogames", *Variety*, July 26, 1993. <https://variety.com/1993/film/news/icm-aims-talent-at-videogames-108947/>.
- Roose, Kevin (2020), "The Coronavirus Crisis Is Showing Us How to Live Online", *The New York Times*, March 17, 2020. <https://nyti.ms/2vxoXno>.
- Schneider, Birgit (2019), "Mensch-Maschine-Schnittstellen in Technosphäre und Anthropozän", in Kevin Liggieri and Oliver Müller (eds.) *Mensch-Maschine-Interaktion. Handbuch zur Geschichte, Kultur, Ethik*, Stuttgart: Metzler, 95–105.
- Sebok, Bryan (2007), *Convergent Hollywood, DVD, and the Transformation of the Home Entertainment Industries*. Dissertation presented to the Faculty of the Graduate School of The University of Texas at Austin.
- Sony (1999), *This is DVD*. https://www.youtube.com/watch?v=qJv_ofK-i2Q (last accessed: June 3, 2025)
- Soon, Winnie, and Geoff Cox (2020), *Aesthetic Programming: A Handbook of Software Studies*, Milton Keynes: Open Humanities Press.
- Srnicek, Nick (2017), *Platform Capitalism*. Cambridge: Polity Press.
- Stalder, Felix (2016), *Kultur der Digitalität*. Berlin: Suhrkamp.
- Sudmann, Andreas (2018), "Zur Einführung. Medien, Infrastrukturen und Technologien des maschinellen Lernens", in Christoph Engemann and Andreas Sudmann (eds.), *Machine Learning. Medien, Infrastrukturen und Technologien der Künstlichen Intelligenz*, Bielefeld: transcript, 9–23.
- Tapscott, Don (2014), *The Digital Economy (Anniversary Edition): Rethinking Promise and Peril in the Age of Networked Intelligence*. New York: McGraw-Hill.
- "Warner home video announces first DVD titles at consumer electronics show" *Business Wire*, January 8, 1997.
- Xhemajli, Arbona (2016), "The role of the teacher in interactive teaching" *International Journal of Cognitive Research in Science Engineering and Education*, 4(1), 31–37.
- Zallot, Vanessa (2022), "Messy Knowledge-Making with Korsakow. Representing Open and Complex Research Findings in Interactive Documentary." *Interactive Film and Media Journal*, 3(1), 67–75.